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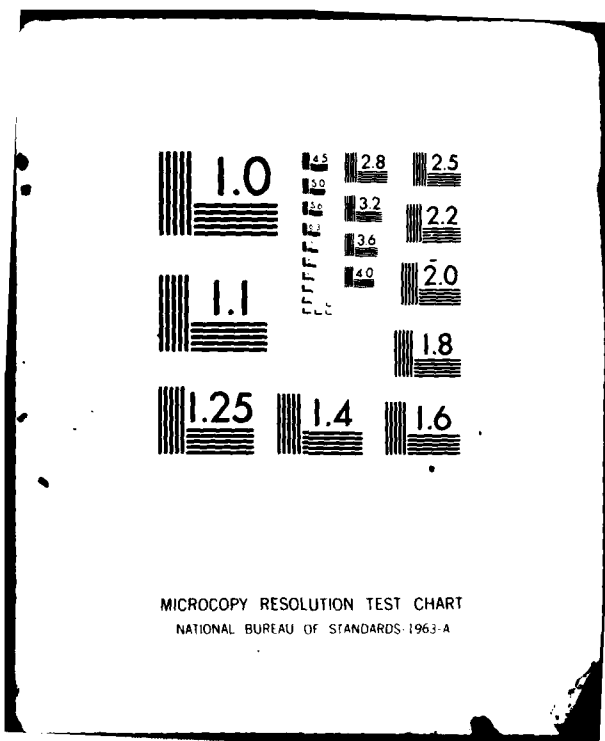
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BY THE U.S. GENERAL ACCOUNTING OFFICE

Report To The Secretary Of The Air Force

AD A109735

More Credibility Needed In Air Force Requirements Determination Process

Lack of knowledge of system operations, ineffective supervision, and questionable quality control practices were major contributors to inaccurate requirements determinations at Warner Robins Air Logistics Center. Because the Air Force uses a standardized system for computing requirements for reparable items, GAO believes that deficiencies noted during this review may exist at other air logistics centers. GAO makes specific recommendations to the Secretary of the Air Force to correct the noted deficiencies and thus improve the credibility of the requirements determination system.



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UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

PROCUREMENT, LOGISTICS,
AND READINESS DIVISION

B-205309

The Honorable Verne Orr
The Secretary of the Air Force

Dear Mr. Secretary:

This report discusses your Department's requirements determination system and recommends ways to make the system more accurate and credible.

We discussed a draft of this report with Air Force officials and have incorporated their comments, as appropriate, throughout the report.

The report contains recommendations to you on pages 16 and 22. As you know, section 236 of the Legislative Reorganization Act of 1970 requires the head of a Federal agency to submit a written statement on actions taken on our recommendations to the House Committee on Government Operations and the Senate Committee on Governmental Affairs not later than 60 days after the date of the report and to the House and Senate Committees on Appropriations with the agency's first request for appropriations made more than 60 days after the date of the report.

Other specific issues that affect the Air Force's requirements determination system are discussed in a separate report to the Secretary of Defense, which contrasts and compares the services' requirements determination systems.

We are sending copies of this report to the Director, Office of Management and Budget; the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, and House and Senate Committees on Appropriations and on Armed Services; and the Secretary of Defense.

Sincerely yours,

A handwritten signature in cursive script that reads "Donald J. Horan".

Donald J. Horan
Director

GENERAL ACCOUNTING OFFICE
REPORT TO THE SECRETARY
OF THE AIR FORCE

MORE CREDIBILITY NEEDED IN
AIR FORCE REQUIREMENTS
DETERMINATION PROCESS

D I G E S T

The Warner Robins Air Logistics Center manages about 34,500 recoverable items--weapons system and equipment parts that can be repaired and reused after failing--valued at about \$3.68 billion. In carrying out its inventory management functions of buying, repairing, stocking, and disposing of inventory, Warner Robins relies heavily on logistics data provided by a complex worldwide network of data processing systems.

WHY THE REVIEW WAS MADE

GAO made this review to determine whether the requirements computations system for reparable items was based on accurate data and whether management's treatment of this data was reasonable. To achieve the overall objective, GAO selected a statistical sample of 65 reparable items in a buy position from the June 30, 1980, computation cycle and performed a detailed analysis of the data elements used in the requirements determination process. Although GAO performed the review at only one Air Force inventory management activity, it believes that deficiencies noted during the review may exist at other air logistics centers.

WHAT THE REVIEW DISCLOSED

GAO found that requirements for 30 of the items were overstated about \$2.5 million and understated about \$261,000. On the basis of the above, GAO estimates that for the 2,039 items in a buy position in June 1980, requirements were overstated \$77 million and understated \$8 million. Additionally, unnecessary procurement actions of about \$1.3 million were in process. The two basic reasons for invalid requirements and buy actions were (1) failure of item managers to follow established policies and procedures and (2) inaccurate data in the requirements system.

GAO believes that many of these problems stem from a lack of understanding of system operations, concepts, and philosophies; a questionable quality control program; and ineffective supervision. (See pp. 13 to 15.) Some examples follow:

- One manager maintained manual records to reconcile unserviceable returns from the bases with receipts of the same returns at the depot. The data on the manual records was the same type data already in the system except for differences in time periods. Whenever the manual records did not agree with the system data, the item manager input the difference in the requirements system and it became part of the failure rate calculation. As a result, the correct system data was invalidated by the additional data. (See p. 13.)
- Two item managers had used an inflated number of users in the safety level computations for about 4 years. The use of this inflated data resulted in safety level stock requirements beyond what was needed. Although the computations had received supervisory review, the use of the data was not questioned, so the item managers did not reduce the number of users in the computation. (See p. 14.)
- In some cases, managers deviated from established policies and procedures for performing asset reconciliations, determining the number of users in the safety level requirements computations, and determining special level requirements. GAO found no evidence to indicate that quality control personnel questioned these deviations. (See p. 15.)

In addition to "people problems," GAO found that certain requirements determination policies and regulations were unclear. Also, the requirements were often based on inaccurate, incomplete, or out-of-date information. Two areas most affected were asset reconciliations and bench mockup requirements. (See pp. 17 to 21.)

RECOMMENDATIONS

GAO recommends that the Secretary of the Air Force direct the Commander, Air Force Logistics Command, to correct the personnel and system problems which caused the misstated requirements and procurement actions found during GAO's review. Questions that need to be answered are:

- Does the structure of the current training program provide item managers and supervisory personnel a clear understanding of the concepts, philosophies, and policies of the requirements system? (See p. 16.)

--Are supervisors adequately carrying out their responsibility to determine that item manager decisions are proper and prudent? (See p. 16.)

--Does the quality control function have sufficient independence to objectively evaluate the implementation of policies and procedures? (See p. 16.)

GAO also recommends that the Secretary of the Air Force direct the Commander, Air Force Logistics Command, to:

--Clarify existing instructions to inform item managers where to obtain the data used in completing the asset reconciliation form so that issues from the system are not duplicated in the various categories. (See p. 22.)

--Develop a reporting system which identifies requirements for the items used in mock-ups and provides information to the item manager as to when mockup requirements are satisfied. This will enable the manager to make an appropriate reduction in the item's requirement and to avoid buying items to support a nonexistent requirement. (See p. 23.)

Other recommendations to the Secretary of the Air Force are discussed on pages 16 and 22.

AGENCY COMMENTS AND GAO'S EVALUATION

GAO obtained official oral comments from Air Force Logistics Command and Warner Robins officials.

The Air Force stated that the report discussed personnel problems and not system problems. However, the Air Force did not indicate its plans for correcting the personnel problems.

GAO agrees that the problems primarily are people-related. However, some of the problems also are system-related and organizational. To illustrate, item managers were not routinely obtaining information on quantities on purchase requests, and quality control personnel were reporting to individuals whose decisions they were reviewing.

Regarding GAO's recommendation concerning the need for properly performed asset reconciliations, the Air Force commented that it is revising the form used in the asset reconciliation process to make it easier to follow and more self-explanatory.

The Air Force did not comment on GAO's recommendation for developing a reporting system for mockup requirements.

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ABBREVIATIONS

FOSSL	follow-on spares support list
GAO	General Accounting Office
ISSL	initial spares support list

CHAPTER 1

INTRODUCTION

Aircraft and equipment operated by the Air Force contain assemblies and parts that periodically fail and require repair and replacements. These items fall into two general categories--those thrown away when failure occurs and those repaired and reused. The latter category is usually referred to as recoverable items.

The Warner Robins Air Logistics Center manages about 34,500 recoverable weapons system and equipment parts valued at about \$3.68 billion. These items, which include radars, radios, and navigation and bombing systems, account for about 87 percent of the items managed and 92 percent of the dollars invested.

In carrying out its inventory management functions, Warner Robins is responsible for ensuring that recoverable items are bought, repaired, stocked, and issued to using activities in a timely manner and in sufficient, but not excessive, quantity to prevent unnecessary downtime and out-of-stock situations.

The Recoverable Consumption Item Requirements Computation System (DO-41) is the keystone in the logistics system. It computes worldwide requirements on the basis of parts usage and stock level data collected through various other data processing systems. Using this data, the DO-41 system projects future needs (requirements) and determines what portion of the total requirements can be met by repairs and existing or onorder stock. When there is a shortfall between the requirement and what the supply system can provide, the system computes a buy requirement. However, certain requirements, such as short-term war reserves, programed foreign military sales, and bench mockups, are computed manually or by other data systems and are input into the DO-41 system. Although the DO-41 system computes the requirements for an item, the item manager must decide whether to buy, repair, redistribute, or dispose of stock. Since requirements computations are a basic supply management tool, the item manager is primarily responsible for its accuracy and use. However, the equipment specialist is responsible for developing and inputting certain data, such as depot maintenance rates and percents, which is used in the requirements computation.

OBJECTIVE, SCOPE, AND METHODOLOGY

Our objective was to determine whether the Warner Robins Air Logistics Center used accurate data to compute requirements for recoverable items and whether management's treatment of this data was reasonable. To evaluate the validity of certain requirements levels, we obtained information from system managers at other air logistics centers.

We statistically selected 65 items from a universe of 4,642 items in a buy position on the June 30, 1980, computation cycle. We selected these items because they should receive the most management attention and thus should be most representative of how items are managed. The buy requirement was \$1.1 billion for the total universe and \$24.3 million for the selected sample items. However, before selecting the 65 items, we adjusted the universe to exclude new items (those with less than 24 months' usage experience), insurance items, and numeric stockage objective items (items with a fixed rather than a computed requirements level) because the requirements computation process for these items is different from other items. Thus, the 65 items were a part of a refined universe of 2,039 items.

We evaluated the accuracy of the data used in the requirements determination process, since incorrect data may result in overstated or understated requirements produced by the system or as adjusted by item managers.

Because much of the data used in the DO-41 system is from other data systems, we did not attempt to verify the accuracy of all the data. For example, the war reserve requirement is computed by the DO-29 system and is an input to the DO-41 system. In such cases, we accepted the requirements computed by the other systems.

For the sample items, where the requirements were based on incorrect data and would require complex calculations to determine the correct requirements, we used the Air Force's CREATE ¹/ system to recompute the items' June 30, 1980, requirement using corrected data.

All projections cited in this report are based on 65 items at a 95-percent confidence level, as shown in appendix I. In certain cases, we discuss matters pertaining to items not in the sample to show the magnitude or impact of using incorrect data. In these cases, we could not project the results of our review.

Although we performed our review at only one air logistics center, we believe that deficiencies noted during the review may exist at other centers.

¹/A method whereby one can hold certain requirements data constant and change other requirements data to determine the effect that the changed data has on the requirements computation.

Some of the information contained in this report is also contained in our report 1/ to the Secretary of Defense, which contrasts and compares the services' requirements determination processes.

1/"The Services Should Improve Their Processes For Determining Requirements For Supplies and Spare Parts" (PLRD-82-12, Nov. 30 1981).

CHAPTER 2

REQUIREMENTS DETERMINATION

PROCESS NEEDS TO BE IMPROVED

The objective of any supply system is to provide the needed quantity of items at the proper place and time. However, this objective must be tempered by the real world constraint that there is never enough money available to meet all stockage requirements. Thus, it is important that managers make intelligent decisions concerning what to buy and how much to buy. However, to make these decisions, managers must have accurate data and must know how the data is used in the requirements determination process. Otherwise, there is a risk of either buying too much, too little, or the wrong type parts.

When parts support is inadequate, materiel readiness of aircraft and equipment may be degraded. On the other hand, when parts support is excessive, limited funds have been spent on material that may never be used. Thus, the managers are in the precarious position of trying to determine the best support.

Using inaccurate data or improperly considering existing data in the requirements determination process at Warner Robins resulted in estimated overstated requirements of \$77 million and understated requirements of \$8 million for items in a buy position during the June 1980 requirements computation cycle. 1/

Additionally, using inaccurate data or improperly considering existing data caused unnecessary procurement actions of about \$1.3 million, which Warner Robins officials canceled after we brought the matter to their attention. The common element in all the unnecessary procurement actions was that items in a purchase request status were not included in the automated requirements determination process. In other words, items on order were not included in determining the asset position. Thus, an understatement of assets resulted in an overstatement of requirements.

In many cases, the inaccurate requirements resulted from incorrect use of system data. In other words, it was what the people did or did not do to the system data that caused the inaccurate requirements. We were not always able to determine why the invalid data was not corrected or why the item managers made invalid changes. Nevertheless, on the basis of discussions with item managers and as evidenced by the type and magnitude of errors noted during the review, we concluded that lack of knowledge of how the requirements system operates, requirements policy

1/The high confidence level (95 percent) on which the estimates were based and the wide variance in individual items' overstatements and understatements caused wide divergences in the range of estimates. (See app. I.)

deviations, and inadequate supervision seemed to be the major contributors.

INACCURATE REQUIREMENTS

Review of 65 sample items in a buy position during the June 1980 requirements computation cycle showed that, due to erroneous requirements and asset data, requirements for 30 of the items were overstated about \$2.5 million and understated about \$261,000, as the table below illustrates.

<u>Category of overstate- ment or understatement</u>	<u>No. of cases</u>	<u>Deviations from the computed requirement</u> <u>Value</u>	
		<u>Overstated</u>	<u>Understated</u>
Requirements:			
Operating	4	\$ 36,989	\$176,808
Special level	16	1,057,156	-
Safety level	5	32,190	66,234
War reserves	5	247,866	-
Additive	<u>5</u>	<u>452,572</u>	<u>-</u>
Total	<u>a/35</u>	<u>1,826,773</u>	<u>243,042</u>
Assets:			
Onhand	10	416,540	318
Due-in	<u>8</u>	<u>212,877</u>	<u>17,155</u>
Total	<u>a/18</u>	<u>629,417</u>	<u>17,473</u>
TOTAL	<u>53</u>	<u>\$2,456,190</u>	<u>\$260,515</u>

a/The number of cases exceeds the number of sample items because several items affected more than one requirements level and overstated or understated assets.

On the basis of the above, we estimate that the adjusted buy universe of 2,039 items had overstated requirements of \$77 million and understated requirements of \$8 million. (See app. I.) Individual item overstatements ranged from \$493 to \$633,562, and understatements ranged from \$318 to \$176,808. We realize that inaccurate requirements do not automatically result in inaccurate procurements of the same magnitude because factors, such as funds available and decisions to accept a higher risk of being out of stock, influence the amount of stock actually procured.

The type of errors disclosed during the review generally can be categorized as follows.

<u>Category of errors</u>	<u>No. of cases</u>
Use of estimated failure rate when actual failure rate data was available	2
Erroneous actual failure rate used in the computation	2
Erroneous depot maintenance rate used in the computation	1
Onhand or due-in assets not included in the computation	16
Number of using locations misstated which resulted in erroneous safety level requirements	2
Improper asset reconciliation which resulted in erroneous requirements	3
Erroneous application of one-per-base policy	8
Erroneous application of initial spares support list (ISSL) policy	4
Unsupported negotiated stock-level requirements	3
Unsupported additive requirements	4
War reserve requirement for an aircraft that does not use the part	1
War reserve requirement will not be reduced when the war reserve kit is phased out or when the item is included in the high-priority mission support kit	<u>4</u>
Total	<u>a/50</u>

a/We reviewed 30 sample items; several had multiple errors.

Specific examples to demonstrate the more significant errors are shown below, and appendix II shows the errors and dollar effect for each of the 30 sample items with erroneous requirements.

Example 1

The requirement for sample item 5821-00-592-0074, a \$1,162 item on the ARC-164 radio system, was overstated 324 items valued at \$376,000. The June 1980 requirements computation showed a 62-item buy requirement, not including an existing purchase request for 35 items. However, because certain data had not been considered in the computation, the item manager reduced the buy to two items. Our review showed that, even after the item manager's review, the item's requirement was overstated 324 items because

- the special level requirement was overstated 166 items,
- the war reserve requirement was overstated 20 items,
- the bench mockup requirement was overstated 10 items,
- onhand assets totaling 185 items were not considered in the computation, and
- the safety level requirement was understated 57 items.

The overstated special level requirement occurred because the one-per-base policy was improperly applied. Air Force regulations state that when the DO-41 system does not compute sufficient stock requirements to adequately support an item, item managers can include an additional requirement of one item for each activity which has enough historical usage data to justify stocking the item. If support problems had existed, the item managers could have justified an additional 30 items because there were 52 using activities and the system was already computing 22 items of support. However, because there were more than sufficient assets to meet support requirements, support problems did not exist. Therefore, the special level requirement of 166--actually 3 per using base--was not needed.

The overstated war reserve requirement included 20 items for the H-3 and C-130 aircraft which do not use the subject item. The overstated bench mockup requirement for 10 items occurred because the item manager had no support for the requirement and did not know how many bench mockup units existed.

The 185 items not considered in the computation resulted from the item manager's failure to properly reconcile the item's asset position. The item manager compared previous procurement figures less losses from the supply system (204 items) with the quantity reported by stocking locations (389 items) and disregarded the 185-item difference rather than determine the reasons for the difference.

After correcting the above requirements levels, we recomputed the systemwide requirements for the item. The recomputation showed that the safety level requirement increased from zero to 57 items.

Example 2

The DO-41 system computed a buy requirement of four for sample item 7025-01-086-8821, a \$4,957 computer part used in aircraft simulators and trainers. In November 1980, the item manager initiated a \$19,828 purchase request to buy the four items. The buy was invalid, however, because certain manual changes were improper and other requirements data was not considered in the computation. Instead of a buy requirement for 4 items, we believe there was an overage of 22 items--a difference of 26 items valued at about \$129,000. The reasons for this difference were as follow:

- Eighteen items were due-in rather than 6 as shown in the computation. The manager manually changed the requirement to compensate for the extra 12 items by establishing a special level requirement of 12.
- Five assets were on hand or on order and were fully interchangeable with the subject sample item but were not considered in the requirements computation.
- Six of the 18 due-ins included in the adjusted requirements computation were not needed according to the item manager. However, he was told to accept the six items because the assets were ready for shipment and the Air Force would be charged full price even if the order was reduced.
- The requirements computation was based on estimated failure rate data when, in fact, actual failure data was available. The data was on an interchangeable item previously discussed. The estimated failure rate was about 29 times greater than a computed rate using the reported failure data for the interchangeable item. The item manager and equipment specialist agreed that the actual failure rate data should have been used in computing the operating requirement.
- We recomputed the systemwide requirements for the item after correcting the other erroneous data mentioned above. As a result of the recomputation, the requirement was further reduced by three items.

On the basis of our analysis, which showed the item in an overage position, the item manager canceled the purchase request for the four items, thus reducing the request \$19,828.

Example 3

Safety level stock is extra stock to cover unexpected delays in supplying parts to field locations and to meet unanticipated demand surges. The safety level formula considers the number of

users; 1/ more users may mean more stock. Air Force regulations include potential users in the computation for 12 months from unit activation or until the users produce a demand level, whichever occurs first.

For two sample items (5841-00-491-5737 and 5841-00-110-1708), the safety level was based on an inflated number of users. On these items, the item managers put in 15 users when, in fact, there were 6 users for one item and no users for the other item. The 15 users had been included in the safety level computation for about 4 years. The item managers told us that they were not aware of the 12-month restriction on including potential users. As a result of including the additional users, the safety level requirements were overstated 10 and 19 items, respectively--a total overstatement of \$20,476.

Example 4

Valid requirements not automatically computed by the DO-41 system are put in the computations as an additive requirement. Examples of additive requirements include bench mockup, special projects, and other one-time needs.

Two sample items had invalid additive requirements valued at \$43,556. One item (5821-00-611-2446), a \$1,788 TV mount used on the A-10 aircraft, had a special project additive requirement of 12 in the June 1980 computation, which the item manager could neither support nor explain. Documentation in the files indicated the additive requirement was established in August 1979 for an unspecified special project, but there was no documentation to explain why the requirement level was computed.

For the other item (5821-00-787-3767), a \$2,210 capacitor, the manager included an additive requirement of 10 for war reserve backorders which duplicated the war reserve requirement already included in the computation.

Example 5

Generally, assets available in the supply system to replace failed items are required to be reported to item managers. However, in-flight maintenance spares--parts carried on board the aircraft--are not visible to the item manager. These items are considered part of the aircraft and are outside the requirements computation.

1/Users are defined as activities which have produced sufficient usage data to justify stocking the item.

Sample item 5841-01-051-3669, a \$4,841 power sequencer, had a peacetime buy requirement for two items in June 1980. The requirements computation showed that six items had failed in the past 2 years and that six items were in stock. However, what was not considered was the fact that 24 items, valued at about \$116,000, were bought to carry on board the aircraft. Thus, potentially 30 assets were available for use.

The part apparently is extremely critical to E-3 radar operation. While we do not question the part's importance, we believe that the onboard parts should be brought within the manager's visibility and considered in the requirements process.

Example 6

To support the operation of new weapons systems and to support aircraft redeployments from one base to another, additional stock requirements are sometimes needed. To meet these needs, the Air Force establishes lists of parts that may be required at base level until usage experience is gained and the requirements can be determined by the logistics system. The early support is provided on initial spares support lists (ISSLs), while later support is provided on follow-on spares support lists (FOSSLs). An ISSL or FOSSL provides authority to stock special levels on certain items for 2 years, after which some other authority must be used to justify retention of stock not supported by usage history.

For four sample items, we found invalid ISSL/FOSSL special levels valued at \$459,665 included in the requirements computations. The levels were invalid primarily because the ISSL or FOSSL lists had expired or were due to expire before completion of the support period for which the requirements were computed. In other words, the item managers were computing requirements beyond the point for which the stock would be needed.

In the case of sample item 5895-00-539-1911, a \$14,734 transponder used on the F-15, F-16, and E-3 aircraft, the item manager included an ISSL/FOSSL special level of 30, valued at \$442,020, in the June 1980 computation. We determined that the requirement was overstated by 18.

The overstated requirement included 16 items to support the F-15 at five bases; however, the ISSL authorization for these bases expired before the period for which the requirement was computed. The remaining requirement for two items, which were for E-3 support, was not valid because the required support was already provided for by other requirements levels.

OVERPROCUREMENTS

The Warner Robins Air Logistics Center has consistently reported significant shortfalls in its funding level over past fiscal years for spares requirements, as shown on the following page.

	<u>1978</u>		<u>1979</u>		<u>1980</u>	
	<u>Required</u>	<u>Funded</u>	<u>Required</u>	<u>Funded</u>	<u>Required</u>	<u>Funded</u>
	------(millions)-----					
Operating stock	\$177.0	\$129.6	\$224.9	\$159.1	\$369.7	\$166.0
War reserves	<u>283.1</u>	<u>65.6</u>	<u>310.9</u>	<u>90.8</u>	<u>493.2</u>	<u>61.5</u>
Total	<u>\$460.1</u>	<u>\$195.2</u>	<u>\$535.8</u>	<u>\$249.9</u>	<u>\$862.9</u>	<u>\$227.5</u>

If, in fact, the funding levels are significantly below what is required, one would normally expect that management would exercise stringent controls over the use of limited resources. This would ensure that resources are not wasted on buying items not needed or on buying items in excess of requirements. However, such is not necessarily the case.

Our review showed that certain incorrect requirements data discussed previously actually contributed to unnecessary procurement actions. For 6 of the 65 sample items, Warner Robins procured or had procurement actions in process for stock valued at \$234,871. We discussed the matters with agency officials who canceled most of the procurement actions. At our suggestion, the officials reviewed about 460 line items with outstanding purchase requests to determine if the current requirements supported the need for the onorder stock. In all, the agency took action to cancel procurements totaling about \$1.3 million for 81 items--primarily fiscal years 1979 and 1980 purchase requests.

The following examples illustrate cases identified during our review where items were procured but not needed. In some cases, the agency canceled the procurements which were on purchase requests but had not proceeded to contract award. In other cases, the agency did not cancel the procurements because the items were on contract, and termination was considered not feasible.

Example 1

In the June 1980 computation, sample item 5821-00-592-0074, an item for the ARC-164 radio system, had over 300 items on hand beyond current needs (see p. 7). At the same time, the item manager had purchase requests in process to buy 83 items--35 for peacetime operating stock, 32 for Air Force nonprogramed use, and 16 for nonprogramed foreign military sales. Onhand stock was available to meet all the requirements and the \$96,446 in planned procurements was not needed. In early July 1980, the contract for the controls was awarded, and deliveries began in September. Consequently, when we brought the matter to the attention of agency officials, it was apparently already too late for them to take action to reduce the procurement.

Example 2

In March 1980, a 32-item purchase request was initiated for sample item 5865-01-021-1649EW, a flare launcher module. The buy was improper because it was the first replenishment buy, and the entire quantity was safety level stock based on estimated failure data. Air Force regulations state that first replenishment procurement for safety level stock will be deferred if there is insufficient usage to establish an actual failure rate. Also, in March 1980, the item manager amended the purchase request to include 29 additional items for nonprogramed foreign military sales. The requirement began to decrease in June 1980. By December 1980, it had dropped until there were 32 items more than were needed, not counting what was being bought, which by that time had increased to 62.

Agency officials took action to cancel the purchase request for the 32 items, after we brought the matter to their attention. The total cancellation was \$7,389, based on the unit price of \$231 when the procurement was initiated. However, since then, the unit price has increased to about \$700 so the eventual procurement would have been significantly higher.

Example 3

In October 1979, a purchase request was issued to the Navy to buy eight electronic modules--sample item 5825-00-370-9289CX--for \$26,000. The requirements computation showed that there were no item failures, and similar to the flare launcher module previously discussed, the purchase request was for safety level stock. Thus, the buy was improper for the same reasons.

By June 1980, the requirements for the item had decreased to such an extent that instead of the item being in a buy position, there were actually five items more than were needed for peacetime requirements when the due-ins were considered. Since the sample item was only 1 of 27 line items on the purchase request, we asked the agency officials to review the current need for all of the items. On the basis of their review, the officials canceled procurement for 17 items and reduced the procurement for 8 other items for a total reduction of about \$413,000.

Air Force Logistics Command and Warner Robins officials told us that quantities on purchase requests are not input in the DO-41 system until money has been committed. Therefore, these items are not part of the system computation. To correct the situation, the command will initiate action to have these quantities shown as an information entry on the DO-41 computation worksheet. This will serve as a reminder to the inventory managers to check the quantities for possible reduction or cancellation.

INCREASED MANAGEMENT ATTENTION
NEEDED TO IMPROVE REQUIREMENTS
DETERMINATION

Invalid requirements and procurements do not just happen. They generally stem from the decision or lack of decision on the part of logistics managers. Generally, a manager's role in the requirements determination process is a difficult task because the process is not an exact science. The manager must, with some degree of certainty, be able to take past information and predict what will happen in the future. Nevertheless, certain key factors aid and enhance the decisionmaking process. Among the more important factors are personnel who (1) understand the requirements system, (2) know what data is needed, (3) know where to obtain the data, and (4) know what the data means. Equally important is the requirement for knowledgeable supervisory and quality control personnel to insure that the decisions are based on accurate data and represent a prudent use of resources.

As evidenced by the type and magnitude of erroneous requirements and procurements, and as discussed below, it is questionable whether the above-mentioned factors are present in Warner Robins' requirements determination process.

Understanding the system

While it is not necessary for item managers and others to totally comprehend each and every aspect of the requirements system, it is important that managers understand the basics as to how the system uses the data being input, how to develop the data and, most important, how to interpret the results. Without these basics, it is questionable whether proper logistics decisions will be made.

As illustrated by the examples on pages 7 to 12, personnel responsible for determining requirements may not fully understand the workings of the DO-41 system, know what information is needed, know where to obtain the data, or know how to interpret the data. In some cases, this lack of understanding can be attributed to unclear and ambiguous policy guidance and instructions. However, in other cases, it appeared the personnel were merely going through the mechanics without understanding what they were doing or why they were doing it.

For example, one manager was maintaining manual records to reconcile unserviceable returns from the bases with receipts of the same returns at the depot. The data on the manual records was the same type data already in the system except for differences in time periods. Whenever the manual records did not agree with the system data, the item manager input the difference in the requirements system and it became part of the failure rate calculation. As a result, the correct system data was invalidated by the additional data.

Item managers frequently mentioned that they did not have enough time to do all that is necessary to properly manage an item. We acknowledge that the item managers do have a substantial workload and competing demands beyond keeping up with the requirements computation. However, we found that many of the errors occurred not because the managers did not have time to review the item but because they incorrectly changed the data elements used in the requirements determination process. (See ch. 3 for further details.)

The fact that there were numerous incorrect adjustments raises the question of the quality of training and supervision. Time did not permit us to evaluate the type and amount of training item managers have had on the requirements system or on supply management in general. Consequently, we did not determine what training needs have not been met. However, what we found and observed indicates that the item managers are unclear on the concept, philosophy, and mechanics of the system. Furthermore, as discussed below, the quality of supervision needs to be improved.

Better supervision needed

Although item managers created many of the erroneous requirements through errors in analyses or judgment and failure to follow prescribed policies and procedures, the documentation containing these errors had been reviewed and approved by their immediate supervisors, in some cases, by two or three levels of supervision. We recognize that supervisory personnel cannot verify each of the data elements in the computations and must place confidence in the item manager. However, some of the errors were obvious enough for us to question the data's validity during our review. This was particularly true for cases involving overprocurement and for cases where supervisory approval of certain data was required before input to the computation.

For example, two item managers had used an inflated number of users in the safety level computations for about 4 years. The use of this inflated data resulted in safety level stock requirements beyond what was needed. No one had questioned the improper figures, so the item managers did not have an incentive to reduce the number of users in the computation.

In the above example, the item managers were trying to insure adequate support was available to meet all the needs. Ironically, the result of overzealous attempts to insure support for any one item can degrade support for other parts, particularly when there is a funding shortfall as has been the case at Warner Robins.

In our opinion, in addition to the lack of close supervision, part of the problem can be attributed to the ingrained philosophy of logistics managers, whether it be at the working or the supervisory level, to maximize the requirements and asset position to avoid out-of-stock situations even if it means buying too much.

Quality control review process is questionable

An integral part of any requirements system is the quality control review process to insure system integrity. Warner Robins has a quality control function; however, its value as an independent review system is questionable. While we did not perform an indepth analysis, the types of errors noted during the review raise serious doubts about the process' effectiveness. For example, we found cases where managers had deviated from established policies and procedures for performing asset reconciliations and determining the number of users in the safety level requirements computation for long periods. We found no evidence that quality control personnel questioned these deviations. In another case, local management consciously decided to deviate from established Air Force Logistics Command policy for determining special level requirements. Again, quality control personnel apparently did not question the deviation.

In our opinion, part of the reason for quality control not questioning policy deviations could be the lack of independence. In one of the above-cited examples, the personnel performing the quality control function work for the people who make the decisions concerning the policy deviations. Therefore, when people evaluating how policies and procedures are implemented report to people who are responsible for implementing the same policies and procedures, the potential for an objective and critical evaluation is reduced.

CONCLUSIONS

The Warner Robins Air Logistics Center significantly misstated its requirements and procurements for items in a June 1980 buy position. The magnitude of overstated requirements--about \$77 million--occurred principally because available data was improperly used in determining requirements. In some cases, the data in the automated requirements system's data base was not corrected by item managers. In other cases, changes made by item managers during their review of the system's computed requirements or preparation of data file changes resulted in the errors being made to the requirements determinations.

Determining requirements is not an easy task and requires the concerted efforts of all concerned to ensure that the right amount of stock is available when and where needed. To accomplish this objective, logistics managers need accurate data and, equally important, must understand how the data affects requirements determinations. These needs are not always being met. The key to correcting the situation rests with supervisory and quality control personnel who must place greater emphasis on ensuring that (1) item managers understand the requirements system and how their actions affect requirements determinations and (2) such actions are based on accurate data and are in accordance with prescribed policies and procedures. Otherwise, it is unlikely that the

validity and credibility of the requirements determination process will improve.

RECOMMENDATIONS

We recommend that the Secretary of the Air Force direct the Commander, Air Force Logistics Command, to correct the personnel and system problems which caused the misstated requirements and procurement actions found during our review. Questions that need to be answered are:

- Does the structure of the current training program provide item managers and supervisory personnel a clear understanding of the concepts, philosophies, and policies of the DO-41 requirements system?
- Are the personnel receiving the training in a timely manner?
- What followup is being performed to determine that personnel responsible for requirements decisions, in fact, understand the requirements system, how it operates, and the ramifications of these decisions?
- Are supervisors adequately carrying out their responsibility to determine that item manager decisions are proper and prudent?
- Does the quality control function have sufficient independence to objectively evaluate the implementation of policies and procedures?

AGENCY COMMENTS AND OUR EVALUATION

The Air Force commented that our report discussed personnel problems and not system problems. However, the Air Force did not indicate its plans for correcting the personnel problems.

We agree that the problems were primarily people-related. However, some of the problems also were system-related and organizational. To illustrate, item managers were not routinely obtaining information on quantities on purchase requests, and quality control personnel were reporting to individuals whose decisions they were reviewing.

CHAPTER 3

SYSTEM IMPROVEMENTS ARE NEEDED FOR PERFORMING

ASSET RECONCILIATIONS AND

DETERMINING BENCH MOCKUP REQUIREMENTS

Invalid data and the lack of a system to provide the data affect the validity of requirements decisions. Two areas most affected are asset reconciliations and bench mockup requirements. More specifically, asset reconciliations are not properly prepared, and item managers frequently use the incorrect data as the basis for the number of assets in the requirements computation. Regarding bench mockups, the Air Force does not have a system for determining requirements for items which may be needed to support bench mockup equipment. Consequently, item managers are at a loss as to the quantity to be included in the requirements computations.

ASSET RECONCILIATIONS NOT PROPERLY PERFORMED

Before deciding what to buy, repair, or dispose of, item managers prepare an asset reconciliation to compare what has been bought with what is reported as onhand stock. In performing the reconciliation, item managers use a standard format that basically involves subtracting assets lost from the supply system from total assets procured to arrive at an accountable balance of assets in stock. The item managers then compare this computed balance with the reported stock balance and research any differences.

The asset reconciliations prepared by Warner Robins Air Logistics Center are of little value for establishing accountability or for deciding what should be bought, repaired, or disposed of because

- certain data used in the reconciliation process may be inaccurate and, as a result, item managers question whether the reported stock actually exists and
- asset reconciliations are not properly prepared and the reasons for differences are not determined.

Improper reconciliations can affect decisions on millions of dollars of inventory. For example, one item manager was uncertain about the reported existence of stock valued at about \$972,000 because inaccurate data led to an incorrect accountable stock balance. A second item manager deleted stock valued at about \$215,000 from a requirements computation after making an inadequate reconciliation which indicated that the stock did not exist.

Inaccurate data used
in the reconciliation process

Certain data on inventory losses--issues from the system--provided to inventory managers by the base level supply system as part of the stock balance and consumption report are not accurate because assets are being erroneously categorized as losses to the system. As a result, the difference between the accountable stock balance (assets procured less assets issued) and the reported assets on hand continues to increase from one reporting period to the next. And since item managers know that the amount of stock procured is accurate and they have no reason to believe that losses from the system are not correct, the tendency is to question the reported stock balance. Consequently, the item manager may use the accountable balance in the requirements computation. However, since the accountable balance may not be understated because the so-called losses to the system were not really losses, the computed buy recommendation could be overstated.

One of the categories shown on the asset reconciliation form under the "loss of assets" section is "installations." The instructions for preparing the reconciliation do not tell the item manager where to get the installation figure. However, a similar category, entitled "initial installation issues," is on the stock balance and consumption report. The similarities of category names made it appear that the figure reported on the stock balance and consumption report under initial installation issues should be used for the installation category on the asset reconciliation form.

For reconciliation purposes, the term "installations" means assets issued from stock and installed on aircraft or other pieces of equipment. However, for stock balance and consumption report purposes, the term "initial installation issues" means any issue where a like item will not be turned in to the base supply activity. Such installations would include items issued for bench mockups. Therefore, if the figure from initial installation issues on the stock balance and consumption report is used in the installation category on the reconciliation form, a duplicating of asset losses would exist. The reason is that the reconciliation form also has a category for bench mockup losses, and item managers apparently were obtaining this figure from other sources outside the DO-41 requirements system. To further compound the problem, base level supply computer errors caused issues to war reserve spare kits to be picked up as supply system losses. The following examples show the effect on the requirements computation of using invalid data in the asset reconciliation.

Example 1

The item manager for sample item 5821-00-592-0074, a part used on the ARC-164 radio, reduced the number of assets in the requirements computation by 185 because the accountable balance differed from the assets reported as on hand. A major part of

the asset writeoff could have been caused by losses to the system that were duplicated. The item manager had deducted assets as issues to bench mockup sets--a valid system loss. At the same time, he had deducted assets as installation losses which potentially duplicated losses already deducted under the bench mockup category.

As shown on page 7, other problems also caused the buy requirement for the item to be overstated; however, the invalid writeoff of 185 onhand assets was a major contributor.

Example 2

The asset reconciliations for sample item 5895-00-539-1911, a \$14,734 transponder, showed a steady increase in the number of assets classified as "installations" and a steady increase in the difference between the accountable balance and assets reported in stock. In the June 1980 reconciliation, the losses to the system through installations totaled 51 items valued at about \$751,000. At the same time, the difference between the accountable and reported inventory was 66 items. By December 1980, installation losses had increased to 85 items valued at \$1.25 million, while the assets reported on hand exceeded the accountable stock balance by 83 items.

The item manager was concerned about the increasing inventory but could not explain what was happening. When the losses increased by 16 items in the next cycle, the manager called one using base--which reported 13 installations--and found that all the losses to installations were actually transfers to war reserve kits. Assets in these kits are reported as in stock and are not losses to the supply system.

Fortunately, the manager did not reduce assets in the requirements computation, although a writeoff could have been made under current policy which provides that if the difference continues for two reconciliation periods, the accountable balance can be used in the requirements computation.

In mid-March 1981, we brought the matter of invalid data being used in the reconciliations to the attention of agency officials who, along with Air Force Logistics Command officials, verified that it was happening. The problem was caused by base supply computers changing a code used to identify war reserve and other transfers within base supply accounts to a code used to identify initial issue transactions. As a result, Air Force Logistics Command sent a letter to the Air Force Data Systems Design Center, the programming organization for the base level computers, asking for changes to correct the problem which was "affecting the requirement computation process of the majority of Air Force managed recoverable items." In our opinion, correcting the computer coding should resolve the problem on future base level transactions. However, since this is a longstanding problem,

asset reconciliations already contain bad data which also needs to be corrected.

Reasons for reconciliation
differences are not researched

Based on an asset reconciliation, the number of assets used in the requirements computation were reduced without any apparent investigation by item managers as to why differences existed between the reported and the computed accountable stock balances.

As previously discussed, the item manager for sample item 5821-00-592-0074 reduced reported assets by 185 items valued at about \$215,000 in the June 1980 computation so that the onhand stock balances reported by field activities would agree with the computed accountable stock balance. This was the third consecutive cycle that assets were dropped from the computation--78 items in December 1979 and 186 in March 1980.

Ironically, present policy permits managers to delete overages/underages on assets from computations on the second consecutive cycle with the same unreconciled difference. In other words, since the difference was 185 items or more for the last two cycles, the figure could be dropped from the computation after an attempt to determine why the figures did not agree. However, in this particular case, the item manager did not attempt to determine the reason for the difference.

Because so many items were written off for the sample item, we briefly reviewed two other ARC-164 radio items managed by the same item manager. In the June 1980 computations, 329 onhand assets, valued at about \$1.26 million for these two radio items, were written off. Although we did not review the reconciliations in detail, we noted that the reported assets were reduced so that the reported balances would agree with the computed accountable balances.

DATA TO DETERMINE BENCH
MOCKUP REQUIREMENTS IS NOT AVAILABLE

Recoverable item requirements for items needed to support bench mockups are invalid because a system does not exist to provide the data needed to compute the requirements.

Maintenance personnel use bench mockups--functional layouts of aircraft systems and equipment--to check parts serviceability. The condition of a part thought to be bad can be checked by putting it into a mockup in place of a part known to be good.

Mockups are authorized in tables of allowance and managed in a requirements system other than the DO-41 system. Normally, the mockups are made from component parts rather than bought as a set. Recoverable parts used to make the mockups are issued from the spares inventory and, thus, are not available for spares use.

Not specifically identifying bench mockup requirements or not having a system which routinely provides requirements data can cause serious problems. For example, when mockup requirements are not specifically identified, items needed to support the requirement are not bought for that purpose. Thus, when field activities request items for mockups, the needs are filled from operating stock and the unexpected loss of operating stock from the supply system can adversely affect aircraft support.

When a specified mockup requirement is filled, the total requirement for the item should be reduced by a like amount to keep from rebuying the quantity. However, the requisition for items in support of a mockup are coded the same as a spares request. Thus, there is no routine, timely system for determining that the requirement has been satisfied.

Two of our sample items were used to support mockup requirements. For one of the items, the requirement was specifically identified. For the other item, the requirement could not be specifically identified. Our review showed that the requirements for these items were overstated about \$380,000 because the need for the requirements could not be justified.

Example 1

The item manager for sample item 5821-00-592-0074, a control unit used in the ARC-164 radio, included a 10-item mockup requirement in the June 1980 computation. We tried to determine the basis for the requirement, but the manager was not able to identify information to support the requirement.

The radio system mockups are managed under one stock number, and we determined that about 800 mockups are authorized. The problem is that eight different controls can be used with the mockup, and information was not available to show how many of the sample item controls were in use or authorized. Thus, the requirement for 10 items, valued at \$11,620, was without basis.

Example 2

Since June 1979 sample item 5895-00-539-1911 has had a mockup requirement of 34 in its requirements computation. The requirement was not updated; and as of June 1980, the requirement of 34 was still shown as part of the total requirement for the item. We discussed this item with officials responsible for managing mockup equipment and were advised that the mockup requirement for the item was 9 (41 authorized and 32 in use). The item manager told us that she was not aware that the mockup requirement had been reduced. On the basis of our analysis, we concluded that the mockup requirement was overstated 25 items, valued at \$368,000.

CONCLUSIONS

Asset reconciliations, which are prepared by item managers to verify onhand stock reported by field activities, are often incorrect because the data used in preparing the reconciliations are incorrect. Namely, assets classified as issued from the system were duplicated under various reporting categories on the asset reconciliation form because item managers did not know where to obtain the needed information. Also, items were classified as issues from the system when, in fact, the assets were merely being transferred from one supply account to another. The reason for this was that invalid coding was assigned to requisitions by base level supply. After we discussed the matter with agency officials, they took action to correct the coding problem.

Our review also showed that when there is a difference in the number of assets computed by the item managers and the number of assets reported by field activities, the item managers frequently do not research the reasons for the difference. All too often, they adjust the computed or reported balances to get the balances to agree. Since the supposedly reconciled balances are used in the requirements computation, invalid asset balances distort the actual requirement for an item and can lead to invalid procurements.

Another problem concerns the lack of a system for identifying requirements for items used to support bench mockup equipment or for determining when these requirements are satisfied. Mockup equipment is managed outside the DO-41 requirements system. However, the individual items used to support the equipment are DO-41 items. As a result, when mockup support requirements are not known but items are requisitioned to support the equipment, there is a drain on the operating stock intended for support of aircraft and other equipment. Also, when mockup requirements are known to item managers but they are not aware that the requirement has been satisfied, the mockup requirement remains in the computation and the system computes a buy for a requirement that no longer exists.

RECOMMENDATIONS

We recommend that the Secretary of the Air Force direct the Commander, Air Force Logistics Command, to take the following actions:

- Follow up on the programing changes being made to ensure that items transferred between base supply accounts are not coded as issues from the supply system.
- Clarify existing instructions to inform item managers where to obtain the data used in completing the asset reconciliation form so that issues from the system are not duplicated in the various categories.

- Reemphasize to item managers the necessity for researching the differences between the stock balances computed during asset reconciliation and the stock balances reported by field activities to ensure the accuracy of the asset data used in the requirements computation.
- Develop a reporting system which identifies, to the item managers, requirements for the DO-41 items used in mockups so that an appropriate requirement level can be established to adequately support the equipment and to avoid the current situation of using operating stock intended for aircraft and other equipment support. The reporting system should also provide information to the item manager as to when mockup requirements are satisfied so that the manager can reduce the item's requirement and avoid buying items to support nonexistent requirements.

AGENCY COMMENTS

The Air Force commented that it is revising the form used in the asset reconciliation process to make it easier to follow and more self-explanatory. The Air Force did not comment on the other recommendations.

APPENDIX I

APPENDIX I

CATEGORIES OF ESTIMATES AND ASSOCIATED
95-PERCENT CONFIDENCE LEVEL INTERVALS
AT THE WARNER ROBINS AIR LOGISTICS CENTER

	Overstated requirements			Understated requirements			Total		
	Estimate	Low	High	Estimate	Low	High	Estimate	Low	High
Operating levels	\$ 1,160,316	\$ 71,519	\$ 2,249,114	\$5,546,331	\$176,808	\$16,417,140	\$ 6,706,647	\$ 213,797	\$17,750,018
Special levels	33,162,171	8,326,122	57,998,219	0	0	0	33,162,171	8,326,122	57,998,219
Safety levels	1,009,776	32,190	2,083,736	2,077,710	66,234	6,150,021	3,087,486	98,424	7,269,021
War reserves	7,821,322	249,331	19,376,030	0	0	0	7,821,322	249,331	19,376,030
Additive levels	14,196,836	452,572	36,917,451	0	0	0	14,196,836	452,572	36,917,451
Assets on hand	13,020,646	415,077	27,581,339	9,975	318	29,527	13,030,621	415,396	27,590,838
Assets due-in on purchase request	6,352,646	202,515	13,283,214	0	0	0	6,352,646	202,512	13,283,214
Assets due-in on contract	434,495	13,851	1,086,824	538,139	17,155	1,592,892	972,634	31,006	2,201,441
Total	\$77,158,208			\$8,172,155			\$85,330,363		

APPENDIX II

LIST OF

WARNER

<u>National stock number</u>	<u>Item</u>	<u>Unit cost</u>	<u>Requirement quantity</u> <u>(note a) over/under</u>
1. 5826-01-056-2101	Power supply	\$ 600	4
2. 5826-01-041-9417	Circuit card	1,123	23
3. 6625-00-193-7860EW	Circuit card	908	16
4. 5865-01-021-1649EW	Module	704	32
5. 5841-00-491-5737	Voltage assembly	1,185	10
6. 5825-00-370-9289CX	Module	2,550	12
7. 5841-00-139-1403	Control	3,937	11
8. 6615-00-108-5857JH	Amplifier board	572	27
9. 5821-00-592-0074	Radio control	1,162	381
			(57)
10. 5895-00-539-1911	Transponder	14,734	43
			(12)
11. 1270-00-109-5737	Indicator	1,324	16

a/Deviation from the buy requirement computed by the DO-41 or adjusted b

LIST OF OVERSTATED AND UNDERSTATEDREQUIREMENTS FORSAMPLE ITEMS AT THEWARNER ROBINS AIR LOGISTICS CENTER

Requirement quantity a) over/under	Requirement value		Reason(s) for overstated/understated requirements
	understated	overstated	
4		\$ 2,400	Estimated failure rates used instead of actual failure rates.
23		25,829	One-per-base special level overstated; onhand assets not considered.
16		14,528	Purchase request quantity not in computation.
32		22,528	Purchase request quantity not in computation.
10		11,850	Number of users overstated resulting in overstated safety level.
12		30,600	Purchase request quantity not in computation; special level overstated.
11		43,307	Purchase request and due-in quantities not in computation.
27		15,444	Onhand assets not considered in computation.
381		442,722	One-per-base special level improper; war reserves requirement for wrong aircraft; unsupported requirement for bench mockups; onhand assets deleted from computation. Safety level understated.
(57)	\$ 66,234		
43		633,562	ISSL special level overstated; unsupported additive requirements for bench mockups.
(12)	176,808		Aircraft application understated.
16		21,184	One-per-base special level overstated; improper asset reconciliation.
* adjusted by the item manager.			

APPENDIX II

	<u>National stock number</u>	<u>Item</u>	<u>Unit cost</u>	<u>Requirement over/(under)</u>
12.	1420-01-074-1090AB	Rolleron	\$ 73	1,400
				(235)
13.	5841-01-051-3669	Power sequencer	4,841	24
14.	1560-00-520-5101LG	Rudder	18,844	2
15.	1270-01-057-5388	Circuit card	2,851	4
16.	5865-01-056-9896EW	Receiver	52,678	3
17.	7035-00-511-0077	Punch unit	1,226	2
18.	1270-00-348-1996	Power supply	9,222	9
19.	1270-01-012-0445	Amplifier	493	1
20.	7025-01-086-8821	Wiring board	4,957	26
21.	5821-00-787-3767	Capacitor	2,210	10
22.	7021-00-477-5716	Computer	26,059	8
23.	5821-00-651-7854	Switch cap	313	3
24.	1280-01-009-1180	Circuit card	318	3
				(1)
25.	5841-00-947-0804	Amplifier	1,465	3
26.	5841-00-110-1708	Counter	454	21
27.	5821-00-611-2446	TV mount	1,788	12
28.	1005-00-922-4550	Drum unit	6,065	5
29.	5826-00-134-5973	Amplifier	845	2
30.	5826-01-031-4978	Control	21,003	12
	Total			

(947418)

APPENDIX

Requirement quantity over/(under)	Requirement value		Reason(s) for overstated/understated requirement
	<u>understated</u>	<u>overstated</u>	
1,400		\$102,200	Purchase request quantity not in computation.
(235)	\$17,155		Due-in assets overstated.
24		116,184	In-flight/maintenance spare assets not considered in computation.
2		37,688	One-per-base special level overstated.
4		11,404	ISSL special level overstated.
3		158,034	Special level overstated.
2		2,452	Unsupported special level.
9		82,998	One-per-base special level overstated; war reserve requirement not phased out.
1		493	One-per-base special level overstated.
26		128,882	Estimated failure rates used instead of actual failure rates; interchangeable assets not considered; special level not supported.
10		22,100	War reserve backorders included as a requirement.
8		208,472	Unsupported ISSL requirement; war reserve requirement being phased out.
3		939	Special level requirement being phased out.
3		954	ISSL and war reserve requirements not phased out.
(1)	318		Onhand asset overstated.
3		4,395	Improper asset adjustment based on reconciliation.
21		9,534	Number of users overstated resulting in overstated safety level; onhand assets not included in computation.
12		21,456	Unsupported special requirement.
5		30,325	Unsupported special level requirement.
2		1,690	Overstated usage and maintenance rates used in computation.
12		252,036	War reserve requirement not properly reduced by amount of high priority mission spares requirement; onhand assets not included in computation.
	<u>\$260,515</u>	<u>\$2,456,190</u>	

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